Catalogue no. 11-626-X — No. 055
ISSN 1927-503X
ISBN 978-0-660-03968-6

Economic Insights

Labour Market Participation of Immigrant and Canadian-born Wives, 2006 to 2014

by René Morissette and Diane Galarneau

Release date: January 7, 2016

Statistics Canada Statistique Canada

Canada

How to obtain more information

For information about this product or the wide range of services and data available from Statistics Canada, visit our website, www.statcan.gc.ca.

You can also contact us by

email at STATCAN.infostats-infostats.STATCAN@canada.ca

telephone, from Monday to Friday, 8:30 a.m. to 4:30 p.m., at the following toll-free numbers:

- Statistical Information Service 1-800-263-1136
- National telecommunications device for the hearing impaired 1-800-363-7629
- Fax line 1-877-287-4369

Depository Services Program

- Inquiries line 1-800-635-7943
- Fax line 1-800-565-7757

Standards of service to the public

Statistics Canada is committed to serving its clients in a prompt, reliable and courteous manner. To this end, Statistics Canada has developed standards of service that its employees observe. To obtain a copy of these service standards, please contact Statistics Canada toll-free at 1-800-263-1136. The service standards are also published on www.statcan.gc.ca under "Contact us" > "Standards of service to the public."

Note of appreciation

Canada owes the success of its statistical system to a long-standing partnership between Statistics Canada, the citizens of Canada, its businesses, governments and other institutions. Accurate and timely statistical information could not be produced without their continued co-operation and goodwill.

Standard table symbols

The following symbols are used in Statistics Canada publications:

. not available for any reference period
.. not available for a specific reference period
... not applicable
0 true zero or a value rounded to zero
0[s] value rounded to 0 (zero) where there is a meaningful distinction between true zero and the value that was rounded
[p] preliminary
[r] revised
x suppressed to meet the confidentiality requirements of the *Statistics Act*
[E] use with caution
F too unreliable to be published
* significantly different from reference category ($p < 0.05$)

Published by authority of the Minister responsible for Statistics Canada

© Minister of Industry, 2016

All rights reserved. Use of this publication is governed by the Statistics Canada Open Licence Agreement.

An HTML version **is also available.**

Cette publication est aussi disponible en français.

Labour Market Participation of Immigrant and Canadian-born Wives, 2006 to 2014

by René Morissette and Diane Galarneau, Social Analysis and Modelling Division and Labour Statistics Division

This *Economic Insights* article documents differences in labour market participation observed between immigrant wives and Canadian-born wives over the 2006-to-2014 period. It also assesses the degree to which the lower participation of immigrant wives, as compared with their Canadian-born counterparts, can be accounted for by differences in socioeconomic characteristics, such as family size, weekly wages of husbands, and labour force participation in the source country. The study uses the Labour Force Survey and World Bank indicators on source-country characteristics to examine these issues. Attention is restricted to Canadian-born women and landed immigrant women aged 25 to 54 who are married (or living in common-law relationships) with husbands aged 25 to 54 who are employed as paid workers.[1] For simplicity, the terms 'husbands' and 'wives' are used to refer to men and women who are married or in common-law relationships.

Introduction

Over the past few decades, several Canadian studies have examined why immigrant men and women earn less than their Canadian-born counterparts. Differences in language skills, relatively low returns to foreign labour market experience, issues of credential recognition, perceived or actual differences in education quality, over-representation of recent immigrants in small firms or low-paying firms and discrimination have been cited as potential factors.[2] One reason these earnings differences have attracted considerable attention is that they have important implications for family income and, thus, for economic well-being.

In addition to differences in hourly wages, differences in the labour market participation of immigrant wives and Canadian-born wives may contribute to differences in family income. Indeed, lower rates of labour market participation among immigrant wives would result in lower family incomes, even in the absence of wage disparities. Yet, in spite of the importance of this issue, the labour market participation of immigrant women has been the subject of relatively little research. While some studies provide descriptive evidence showing that immigrant women have lower labour market participation rates than Canadian-born women (e.g., Preston and Giles 2004), none attempt to quantify the degree to which the difference between the two groups is explained by observed socioeconomic characteristics.

This article uses the Labour Force Survey (LFS) and World Bank indicators on source-country characteristics to fill this gap. It assesses the extent to which the lower labour force participation rate of immigrant wives, as compared with that of their Canadian-born counterparts, can be accounted for by socioeconomic factors, such as family size, weekly wages of husbands, and labour force participation in the source country.

Immigrant wives—especially the younger ones—participate less often in the labour market than Canadian-born wives

Of all immigrant wives aged 25 to 54 whose husbands were aged 25 to 54 and were employed as paid workers, 76% participated in the labour market—i.e., they had a job or actively looked for one—from 2010 to 2014 (Table 1). The labour force participation rate of Canadian-born wives was approximately 12 percentage points higher, at about 88%.

Regardless of their education level, the size of their family or their area of residence, immigrant wives have participation rates that are at least 6 percentage points lower than those of Canadian-born wives. This is true both for the 2006-to-2009 period and the 2010-to-2014 period.

While differences in labour force participation between immigrant women and Canadian-born women are prevalent, they vary in magnitude across age groups. The difference is largest for women aged 25 to 34, at approximately 20 percentage points. It is more modest for women aged 35 to 44, at 9 to 10 percentage points, and it is smallest for women aged 45 to 54, at about 4 percentage points.

The smaller difference observed for women aged 45 to 54 suggests that the labour market participation of immigrant wives might increase with time spent in Canada. The fact that immigrant wives who arrived in Canada within the last five years have lower participation rates than their counterparts who arrived at least six years ago is consistent with this view. However, the positive

1. An additional restriction is that the countries included must have, in the Labour Force Survey, at least 20 observations on immigrant wives employed as paid workers over the 2006-to-2014 period.
2. Picot and Sweetman (2005) review studies that examine the widening wage differences between the two groups.

Table 1
Labour market participation rates of wives in immigrant and Canadian-born couples, 2006 to 2014

	2006 to 2009		2010 to 2014	
	Immigrant couples	Canadian-born couples	Immigrant couples	Canadian-born couples
	percent			
Overall	75.1	86.4	76.2	87.8
Age of wives				
25 to 34	65.1	86.3	65.6	87.2
35 to 44	77.9	87.1	77.9	88.6
45 to 54	81.7	85.6	84.3	87.6
Arrival of wives in Canada				
5 years ago or less	62.9	...	66.2	...
6 to 10 years ago	73.6	...	74.8	...
More than 10 years ago	82.8	...	82.2	...
Education level of wives				
Less than high school	62.1	70.6	59.6	72.8
High school	70.9	82.4	69.1	81.8
Trades certificate or diploma	77.8	86.2	80.2	87.5
Postsecondary education below bachelor's degree	80.3	88.4	80.0	89.2
Bachelor's degree or more	76.3	90.9	78.2	92.3
Education level of husbands				
Less than high school	70.1	80.9	68.3	84.0
High school	75.3	87.0	73.0	87.5
Trades certificate or diploma	75.8	85.1	81.9	86.1
Postsecondary education below bachelor's degree	78.4	88.4	79.3	89.2
Bachelor's degree or more	74.3	86.7	76.0	88.9
Family size				
2 persons	79.3	90.7	84.3	92.2
3 or 4 persons	76.2	86.8	76.3	88.1
5 or more persons	70.5	76.9	71.0	79.0
Area of residence				
Non-census metropolitan area	68.9	84.2	73.6	85.7
Montréal	71.8	88.4	72.0	91.0
Toronto	76.3	87.7	76.9	88.2
Vancouver	73.6	84.8	76.7	87.7
Other census metropolitan areas	75.9	87.3	77.1	88.3

... not applicable
Notes: The sample consists of Canadian-born and landed immigrant women aged 25 to 54, married (or living in common-law relationships), with husbands aged 25 to 54 who are employed as paid workers. Immigrant couples are couples where both husband and wife were born outside Canada. Canadian-born couples are couples where both husband and wife were born in Canada.
Source: Statistics Canada, Labour Force Survey (March and September).

relationship between participation and years since arrival does not imply a causal link. Instead, it might reflect a cohort effect—that is, falling labour market participation rates across successive entry cohorts of immigrants.[3]

Along with variation by age, the participation rates of immigrant wives vary by region of birth. Over the 2006-to-2009 period and the 2010-to-2014 period, female immigrants from Africa and Asia had, on average, lower participation rates than their counterparts from Latin America or Europe (Chart 1). Depending on the country of birth considered, the labour market participation rates of immigrant wives ranged from about 50% to 90% (Table 2).[4] Canadian-born wives were at the higher end of this distribution, at 87%. Overall, Tables 1 and 2 indicate that differences in labour market participation rates between immigrant and Canadian-born wives are widespread and generally substantial.

About half of the difference in labour market participation between immigrant wives and Canadian-born wives can be accounted for by socioeconomic characteristics

Immigrant wives may have relatively low participation rates for a variety of reasons.

Their families, which average close to four persons, are larger than those of their Canadian-born counterparts (Table 3). Since family size is negatively correlated with labour force participation (Table 1), this may account for at least some the differences documented above.

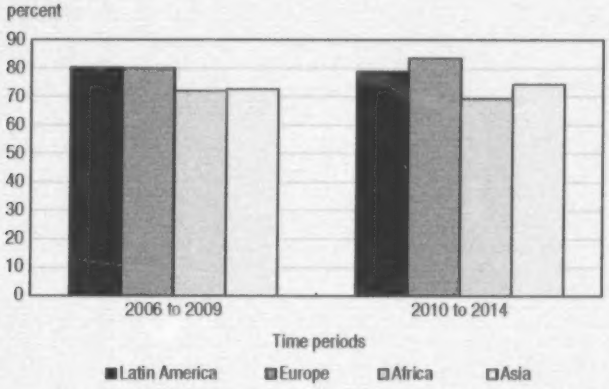
Immigrant wives also generally come from countries where the involvement of women in the labour market, measured relative to that of men, is lower than it is in Canada. For instance, during the 2000s, female-to-male labour market participation ratios in

3. Disentangling these two competing views with LFS data is not possible because of the short time interval—2006 to 2014—for which LFS data on immigrants are available. For instance, computing the participation rates at age 25 to 34 of women who are 45 to 54 years old in 2014 requires data for 1994, a requirement that LFS data do not satisfy.
4. Table 2 shows numbers for countries of birth for which LFS samples contain 100 observations or more.

Latin America, Africa and Asia were about 0.60—much lower than the ratio of 0.84 observed in Canada (Chart 2).[5] If, as Chart 3 shows, women from countries where labour market participation of women is low relative to that of men also participate less in the Canadian labour market (Frank and Hou 2015), then differences between immigrant and Canadian-born wives may reflect country-level effects.

Lower wage offers are potentially a third factor. Simple economic models predict that, all else being equal, lower wages make employment less attractive and, thus, tend to reduce labour force participation. When observationally equivalent women are compared, the hourly wages of immigrant wives are 20% lower than those of Canadian-born wives during the 2006-to-2014 period.[6] In other words, standardized real hourly wages of employed immigrant wives are lower than those of their Canadian-born counterparts. As Chart 4 shows, groups of wives—defined by country of birth—who earn relatively low standardized real hourly wages also display relatively low standardized labour market participation rates. This pattern is consistent with the view that lower wage offers might reduce the labour force participation of immigrant wives.[7]

Chart 1
Labour market participation rates of immigrant wives in the Canadian labour market, by region of birth, 2006 to 2009 and 2010 to 2014



Notes: Labour market participation rates for landed immigrant women aged 25 to 54, married (or living in common-law relationships), with husbands aged 25 to 54 who are employed as paid workers.
Sources: Statistics Canada, Labour Force Survey (March and September).

Table 2
Labour market participation rates of immigrant wives in Canada, by country of birth, selected countries, 2006 to 2014

	Labour market participation rate of immigrant wives
	percent
Country of birth	
Jamaica	90.8
Philippines	89.4
Poland	86.6
Romania	86.5
Trinidad and Tobago	85.4
Haiti	85.0
France	84.8
Bosnia and Herzegovina	84.6
Fiji	84.2
Guyana	84.2
Nigeria	83.4
Italy	82.2
El Salvador	81.5
United Kingdom	81.4
Yugoslavia (former)	80.3
Vietnam	80.0
South Africa	79.2
Ukraine	79.0
Portugal	78.9
Germany	78.4
United States	76.4
Colombia	75.8
China	75.3
India	75.3
Hong Kong	74.4
Russia	72.8
Iran	72.7
Egypt	68.2
Sri Lanka	68.2
Cambodia	66.9
Ethiopia	64.7
Morocco	63.8
Algeria	58.6
Bangladesh	58.1
South Korea	56.2
Lebanon	55.2
Mexico	54.8
Iraq	53.3
Afghanistan	52.7
Pakistan	45.8
All immigrant wives	**75.7**
All Canadian-born wives	**87.2**

Notes: Labour market participation rates are shown for immigrant wives who come from countries for which Labour Force Survey sample sizes equal 100 observations or more. The sample consists of landed immigrant women aged 25 to 54, married (or living in common-law relationships), with immigrant husbands aged 25 to 54 who are employed as paid workers. Numbers for Canadian-born wives refer to Canadian-born women aged 25 to 54, married or (living in common-law relationships), with Canadian-born husbands aged 25 to 54 who are employed as paid workers.
Source: Statistics Canada, Labour Force Survey (March and September).

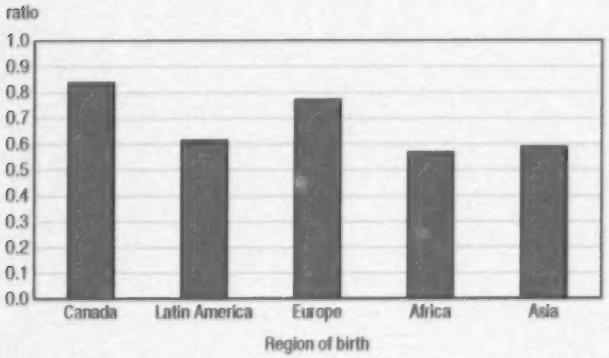
5. The ratios shown in Chart 2 are weighted using LFS sampling weights.
6. This result is obtained after regressing the natural logarithm of real hourly wages of wives employed as paid workers on the following: an immigrant indicator; wives' age (measured using a quadratic term) and education levels; husbands' age (measured using a quadratic term), education levels, permanent job status, full-time job status and weekly wages; family size; place of residence; country-level female-to-male labour market participation ratios; and the number of other family members who are employed.
7. Standardized labour market participation rates are computed as follows. First, a binary indicator of labour market participation is regressed on wives' age and education levels, and on husbands' age, education levels, permanent job status, full-time job status and weekly wages, as well as on family size, place of residence, country-level female-to-male labour market participation ratios, and the number of other family members who are employed. Next, residuals from this regression are averaged by country of birth and added to the average labour market participation rate of all wives in the sample. Standardized log real wages are obtained using a similar procedure for wives employed as paid workers.

Table 3
Selected statistics for immigrant and Canadian-born couples, 2006 to 2009 and 2010 to 2014

	2006 to 2009		2010 to 2014	
	Immigrant couples	Canadian-born couples	Immigrant couples	Canadian-born couples
	percent			
Percentage of wives				
Employed	68.6	83.4	69.2	84.7
Participating in the labour market	75.1	86.4	76.2	87.8
With a bachelor's degree or more	41.0	25.2	47.8	30.1
With university-educated husbands	46.8	21.9	50.5	23.4
With husbands employed full-time	95.8	97.5	94.9	97.2
With husbands in permanent jobs	92.6	93.4	90.6	92.8
	number			
Average usual weekly work hours				
Wives (main job)	24.3	28.6	24.2	29.2
Wives (all jobs)	24.7	29.1	24.6	29.7
Husbands (main job)	39.4	40.5	39.0	40.3
Husbands (all jobs)	40.2	41.1	39.8	40.9
Husbands and wives (all jobs)	64.9	70.2	64.4	70.6
Average number of people employed in the family (other than husband and wife)	0.30	0.25	0.26	0.23
Average family size	3.9	3.4	3.8	3.4
	2014 dollars			
Average hourly wages of paid workers				
Wives	20.28	24.18	21.65	25.97
Husbands	26.09	29.77	26.31	31.01
Average weekly wages of paid workers				
Wives	726	839	766	909
Husbands	1,029	1,201	1,030	1,248

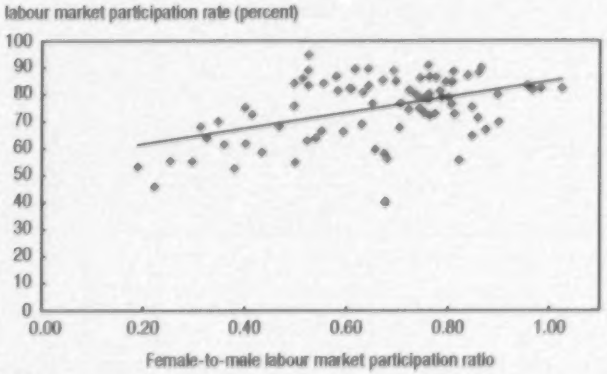
Notes: The sample consists of Canadian-born and landed immigrant women aged 25 to 54, married (or living in common-law relationships), with husbands aged 25 to 54 who are employed as paid workers. Immigrant couples are couples where both husband and wife were born outside Canada. Canadian-born couples are couples where both husband and wife were born in Canada. University-educated husbands have a bachelor's degree or more.
Source: Statistics Canada, Labour Force Survey (March and September).

Chart 2
Female-to-male labour market participation ratio in country of birth, by region of birth, 2000-to-2009 average



Notes: A ratio of 1 means that the labour market participation rate of women in a given region equals the labour market participation rate of men in that region. Ratios are weighted using the Labour Force Survey sampling weights.
Sources: Statistics Canada, Labour Force Survey (March and September); and World Bank data indicators on social development.

Chart 3
Labour market participation rates of wives in the Canadian labour market and female-to-male labour market participation ratios in source country, by country of birth



Notes: Labour market participation rates are shown for Canadian-born and landed immigrant women aged 25 to 54, married (or living in common-law relationships), with husbands aged 25 to 54 who are employed as paid workers. They are averaged over the 2006-to-2014 period and shown for countries with at least 20 observations of wives employed as paid workers, i.e., for 85 countries (including Canada). Female-to-male labour market participation ratios are averaged over the 2000-to-2009 period. A female-to-male labour market participation ratio of 1 means that the labour market participation rate of women in a given country equals that of men.
Sources: Statistics Canada, Labour Force Survey (March and September); and World Bank data indicators on social development.

Other factors are expected to be associated with higher participation rates among immigrant women. Their higher level of educational attainment relative to Canadian-born women is one of these. Another is the fact that the husbands of immigrant wives earn lower weekly wages than those of Canadian-born wives (Table 3). If lower husbands' wages induce women to increase their labour supply (Devereux 2004; Morissette and Hou 2008), immigrant wives should, all else being equal, display higher participation rates than Canadian-born wives.

Of the five factors mentioned above—family size, country-level female-to-male labour market participation ratios, wives' real hourly wages, wives' education, and husbands' wages—wives' real hourly wages is the most difficult to assess. The reason is that while real hourly wages are observed for wives who are employed, they are not observed for non-employed wives. As a result, one needs to estimate the potential wage offers received by non-employed women, a statistically difficult task.[8] In contrast, the four other factors are observed for both employed and non-employed wives.

For this reason, the study first assesses the contribution of these four factors using multivariate analyses.[9] The results are shown in Table 4. During the 2006-to-2014 period, the labour market participation rate of immigrant wives was 11.4 percentage points lower than that of Canadian-born wives. Controlling for family size reduces this gap to 9.9 percentage points, thereby suggesting that the lower participation rate of immigrant wives is partly the result of their larger families. Controlling both for family size and country-level female-to-male labour market participation ratios reduces the participation difference between immigrant women and Canadian-born women to 4.8 percentage points. This suggests that country-level effects, as measured by female-to-male labour market participation ratios, account for a sizeable fraction of the 11.4-percentage-point difference. Adding further controls for the age and education of wives increases the adjusted difference in participation rates (from -4.8 percentage points to -5.8 percentage points). This is to be expected, since immigrant wives are more educated than Canadian-born wives, and labour market participation is positively correlated with education. Controlling for the weekly wages of husbands (along with family size, country-level female-to-male participation ratios, and wives'

Chart 4
Standardized labour market participation rates of wives in the Canadian labour market and standardized real hourly wages earned in Canada by wives employed as paid workers, by country of birth, 2006 to 2014

Notes: Canadian-born and landed immigrant women aged 25 to 54, married (or living in common-law relationships), with husbands aged 25 to 54 who are employed as paid workers. Numbers are shown for countries with at least 20 observations of wives employed as paid workers, i.e., for 85 countries (including Canada). Standardized labour market participation rates and real wages are obtained after controlling for all socioeconomic characteristics shown in Table 4 of the study.
Sources: Statistics Canada, Labour Force Survey (March and September); and World Bank data indicators on social development.

Table 4
Differences in labour market participation rates between immigrant wives and Canadian-born wives, 2006 to 2014

Control variables	Time periods		
	2006 to 2009	2010 to 2014	2006 to 2014
	percentage points		
None	-11.3	-11.6	-11.4
Plus family size	-9.5	-10.2	-9.9
Plus country-level female-to-male participation ratios	-5.7	-4.2	-4.8
Plus wives' age and education	-6.3	-5.5	-5.8
Plus husbands' weekly wages	-6.9	-6.2	-6.5
Plus husbands' full-time and permanent job status	-7.0	-6.3	-6.5
Plus husbands' age and education	-6.2	-5.7	-5.8
Plus number of other family members employed	-6.1	-5.7	-5.8
Plus province and CMA of residence	-5.9	-4.9	-5.3

Notes: CMA stands for census metropolitan area. The sample consists of Canadian-born and landed immigrant women aged 25 to 54, married (or living in common-law relationships), with husbands aged 25 to 54 who are employed as paid workers. Because of rounding, the numbers with no control variables may differ slightly from the differences in outcomes (between wives in immigrant couples and wives in Canadian-born couples) shown in Table 3 of the study.
Sources: Statistics Canada, Labour Force Survey (March and September); and World Bank data indicators on social development.

8. In principle, one could try to estimate a selectivity-corrected wage equation to impute wages for non-employed wives. However, doing so requires finding an instrumental variable that affects women's likelihood of participating but that does not affect their wage offers. Identifying such an instrumental variable is not trivial.
9. Using a linear probability model, a binary indicator of wives' labour market participation is regressed on an immigrant indicator and a set of socioeconomic characteristics.

age and education) also raises the adjusted difference in absolute value (from –5.8 percentage points to –6.5 percentage points), thereby confirming that the lower weekly earnings of immigrant husbands do not account for the relatively low participation rate of their wives.

After including additional controls for the number of other family members with employment, location of residence, the age and education of husbands, and indicators of husbands' full-time employment and permanent job status, the difference in the labour force participation rates of immigrant and Canadian-born wives remains 5.3 percentage points. Hence, the socioeconomic characteristics shown in Table 4 account for about half of the 11.4-percentage-point difference in participation observed for the 2006-to-2014 period, with family size and country-level effects accounting for a significant fraction of the difference.[10,11]

Uncertainty about the contribution of wages

The next step is to examine whether, when all the characteristics discussed above (and shown in Table 4) are controlled for, the difference in labour force participation between immigrant wives and Canadian-born wives is further reduced when the wages of wives are taken into account.

As mentioned above, answering this question poses statistical challenges because wage offers are not observed for non-employed wives. Some non-employed wives of a given age, education level, family size and place of residence might be inactive because the costs of participating in the labour market are relatively high for them.[12] Others may be inactive because the wages they can potentially earn are relatively low. More precisely, some of these wives might potentially earn wages that are lower than the typical hourly wage—for example, the median hourly wage—received by their employed counterparts. The difficulty here is that while some non-employed wives might be offered wages that correspond to, say, the 40th percentile of the wage distribution of

Table 5
Labour market participation rates of unmarried immigrant and Canadian-born women, 2006 to 2014

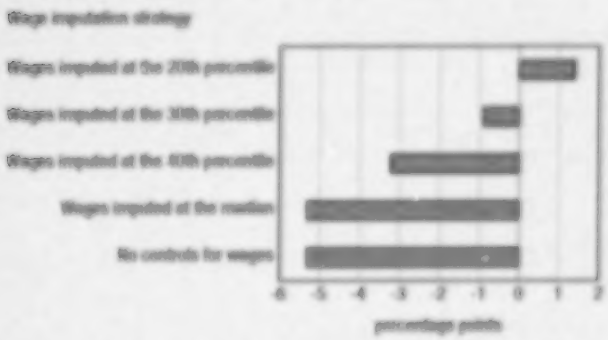
	2006 to 2009		2010 to 2014	
	Immigrant women	Canadian-born women	Immigrant women	Canadian-born women
	percent			
Overall	**83.0**	**84.3**	**82.8**	**83.8**
Age				
25 to 34	82.7	85.8	79.9	84.9
35 to 44	83.9	84.9	84.3	84.6
45 to 54	82.4	82.2	83.9	82.1
Arrival in Canada				
5 years ago or less	77.9	..	78.7	..
6 to 10 years ago	79.8	..	80.7	..
More than 10 years ago	84.8	..	84.2	..
Education level				
Less than high school	61.7	55.6	56.9	53.0
High school	77.1	82.0	73.6	78.4
Trades certificate or diploma	83.5	85.9	88.3	83.8
Postsecondary education below bachelor's degree	86.3	87.4	83.9	86.9
Bachelor's degree or more	89.5	93.7	89.8	94.1
Family size				
1 person	87.1	85.8	85.8	85.9
2 persons	82.9	84.1	83.6	83.3
3 or 4 persons	80.5	82.7	79.7	81.4
5 or more persons	70.8	64.2	73.8	65.3
Area of residence				
Non-census metropolitan area	83.4	80.8	85.6	79.7
Montréal	81.6	85.7	80.4	87.2
Toronto	83.4	86.9	82.7	86.7
Vancouver	83.0	84.8	83.3	84.4
Other census metropolitan areas	83.3	84.3	83.8	84.0

.. not applicable
Note: The sample consists of Canadian-born and landed immigrant women aged 25 to 54 who are neither married nor living in common-law relationships.
Source: Statistics Canada, Labour Force Survey (March and September).

10. This conclusion holds when the socioeconomic characteristics are entered into the multivariate analyses in reverse order. Controlling for location of residence, the number of other family members employed, husbands' wages and employment status, and the age and education of both partners' accounts for none of the observed difference in participation. Adding country-level female-to-male labour market participation ratios to these controls reduces the adjusted difference markedly, from 11.6 percentage points to 6.2 percentage points. Adding the country-level effects and family size to these controls again reduces the observed difference by about half.
11. An Oaxaca decomposition of differences in female labour market participation rates cannot be applied here, since one of the explanatory variables—country-level female-to-male participation ratios—is a constant and, thus, is not identified for one of the groups considered, namely Canadian-born women.

employed women in a given age, education, family size and place of residence category, others might potentially earn less or more than the 40th percentile, should they accept a job offer.

Chart 5
***Adjusted difference* in labour market participation rates between immigrant wives and Canadian-born wives, 2006 to 2014**



Notes: The numbers show the difference in labour market participation rates between immigrant wives and Canadian-born wives obtained after controlling for all socioeconomic characteristics shown in Table 4 of the study. Wages of non-employed Canadian-born wives are imputed based on various percentiles of the wage distribution of employed Canadian-born wives within a given age group, education level, family size, and region category. Wages of non-employed immigrant wives are imputed based on various percentiles of the wage distribution of employed immigrant wives from a given country.
Sources: Statistics Canada, Labour Force Survey (March and September); and World Bank data indicators on social development.

Chart 5 shows that the distinction matters empirically. Differences in labour market participation between immigrant wives and Canadian-born wives are computed after controlling for all the socioeconomic characteristics of Table 4, as well as for wives' wages. Results are shown for various wage imputation strategies.[13] When wages of non-employed Canadian-born wives in a given group (defined by the interaction of three age categories, three education levels, four family-size categories and seven regions) are imputed based on the median hourly wage of their employed counterparts in that group and when wages of non-employed immigrant wives from a given country are imputed based on the median wage of their employed counterparts from that country, the adjusted participation difference remains unchanged at 5.3 percentage points.[14] When wages of non-employed wives are imputed based on the 40th percentile of the cells defined above, the adjusted difference drops from 5.3 percentage points to 3.2 percentage points. And, when wage imputation is based on the 30th percentile, the adjusted difference drops to about 1.0 percentage point. Hence, these numbers suggest that the lower wages received by immigrant wives might partly explain why immigrant wives are less active in the labour market than their Canadian-born counterparts. However, there is uncertainty regarding the exact contribution of wages to the difference in participation observed between the two groups of women.

Unmarried immigrant and Canadian-born women have similar labour market participation rates

In the absence of a partner who can potentially contribute to the employment income of the family, immigrant women might participate in the labour market to a similar extent as Canadian-born women because of economic necessity. Table 5 investigates this by comparing the labour market participation rates of immigrant women and Canadian-born women aged 25 to 54 who are neither married nor living in common-law relationships. Overall, the large differences in labour market participation rates observed between immigrant and Canadian-born wives are not evident for unmarried women. About 83% of unmarried immigrant women participated in the labour market from 2010 to 2014, compared with 84% of unmarried Canadian-born women. Because unmarried immigrant women have higher levels of education than their Canadian-born counterparts, controlling for women's education levels marginally increases the differences in labour market participation between the two groups from about 1.0 percentage point to between 2.0 percentage points and 2.6 percentage points, depending on whether the 2006-to-2009 period or the 2010-to-2014 period is considered.[15] The corresponding differences between immigrant and Canadian-born wives are substantially larger, at 11.5 percentage points to 12.3 percentage points. Hence, differences in labour market participation between immigrant women and Canadian-born women are very small for unmarried women and are substantially smaller for this group than they are for married women.

12. This includes monetary costs, such as those related to child care or elder care, as well as non-monetary costs, such as the stress associated with paid employment.
13. Wages of employed wives are drawn from the LFS.
14. When imputing wages of non-employed Canadian-born wives, three age categories (25 to 34, 35 to 44, and 45 to 54), three education levels (high school or less, bachelor's degree or more, and other), four family-size categories (two persons, three persons, four persons, and five persons or more), and seven regions (Atlantic provinces and the six remaining provinces) are used. The interaction of these four dimensions yields 252 groups from which 121,167 observations on employed Canadian-born wives (i.e., 480.8 observations per group) are used to compute group-specific wage percentiles. When imputing wages of non-employed immigrant wives, percentiles are based on the country of birth of immigrant wives. Since the sample of employed immigrant wives consists of 13,832 observations from 84 countries, country-specific wage percentiles are based, on average, on 152.7 observations per group. Ideally, one would like to compute group-specific wage percentiles for immigrant wives based on the interaction of age, education, family size, region of residence and country of birth. Sample-size limitations preclude this grouping scheme.
15. These adjusted differences result from a linear probability model of labour market participation that includes education indicators and an immigrant indicator.

Summary

Immigrant wives participate in the Canadian labour market less than do Canadian-born wives. Because this lower participation has implications for the income and living standards of immigrant families, understanding the sources of the difference is important.

This study shows that differences in socioeconomic characteristics account for about half of the difference in labour market participation between immigrant wives and their Canadian-born counterparts observed for the 2006-to-2014 period. The results indicate that female-to-male labour market participation ratios in the source country and, to a lesser extent, family size are key drivers of the difference in participation observed between the two groups of women. The lower wages received by immigrant women in the Canadian labour market appear to play a role, but their contribution is difficult to quantify.

The results raise the question of which factors country-level female-to-male labour market participation ratios capture. Frank and Hou (2015) show that these ratios remain statistically significant in models of the labour market participation of immigrant women even after source-country gender-role attitudes are controlled for.[16] This finding suggests that these ratios capture, at least partly, other influences that affect the participation of immigrant women.

Overall, the study shows that a thorough understanding of differences in family income between immigrants and the Canadian-born requires an understanding not only of wage differences—as most Canadian studies have achieved so far—but also of differences in the labour market participation of wives.

References

Devereux, P.J. 2004. "Changes in relative wages and family labor supply." *Journal of Human Resources* 39: 696–722.

Fortin, N.M. 2005. "Gender role attitudes and the labour-market outcomes of women across OECD countries." *Oxford Review of Economic Policy* 21 (3): 416–438.

Frank, K., and F. Hou. 2015. *Source-country Female Labour Force Participation and the Wages of Immigrant Women in Canada*. Analytical Studies Branch Research Paper Series, no. 365. Statistics Canada Catalogue no. 11F0019M. Ottawa: Statistics Canada.

Mincewitz, R., and F. Hou. 2008. "Does the labour supply of wives respond to husbands' wages? Canadian evidence from micro data and grouped data." *Canadian Journal of Economics* 41 (4): 1183–1210.

Picot, G., and A. Sweetman. 2005. *The Deteriorating Economic Welfare of Immigrants and Possible Causes: Update 2005*. Analytical Studies Branch Research Paper Series, no. 262. Statistics Canada Catalogue no. 11F0019M. Ottawa: Statistics Canada.

Preston, V., and W. Giles. *Employment Experiences of Highly Skilled Immigrant Women: Where Are They in the Labour Market?* Paper presented at the Gender and Work: Knowledge Production in Practice conference, York University, October 1 and 2, 2004.

16. See Fortin (2005) for an analysis of gender role attitudes and the labour market outcomes of women in several countries of the Organisation for Economic Co-operation and Development.